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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,783	02/18/2004	Alex Krister Raith	4015-5196	2741
24112 7590 11/03/2009 COATS & BENNETT, PLLC 1400 Crescent Green, Suite 300 Cary, NC 27518				
EXAMINER NGO, NGUYEN HOANG				
ART UNIT		PAPER NUMBER		
2473				
MAIL DATE		DELIVERY MODE		
11/03/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/780,783

Applicant(s)

RAITH, ALEX KRISTER

Examiner

NGUYEN NGO

Art Unit

2473

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 56-67 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 56-67 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SG/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

This communication is in response to the amendment of 7/1/2009. Amendments to the claims have been entered. Accordingly, Claims 1-41 and 42-55 have been cancelled and Claims 56-67 are currently pending in the application.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 56-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Funk (US 6169884), in view of Ohno (US 5848062), hereinafter referred to as Funk and Ohno.

Regarding claim 56, 62, Funk discloses a transceiver in a radio communication system (mobile radio device having a radio transmitter, abstract) comprising:

a transmitter for transmitting data over an air interface at a transmission data rate (radio 101 of figure 1 consisting of antenna 113 that radiates an amplified transmission signal, col3 lines 30-40 and figure 1);

a temperature measuring device for determining a temperature of said transmitter (thermister 115 of figure 1, col3 lines 13-53); and

a processor (processor 109 of figure 1) coupled to said transmitter and said temperature measuring device and configured to, in response to determining that a measured temperature exceeds a temperature threshold (a high temperature threshold, col3 lines 40-67), reduce an average power consumption of the transmitter (transmission power is reduced, col4 lines 20-30) by a controlled amount (col4 lines 1-10), by adjusting a transmit power per bit of the transmitter (control transmission power by reducing the power level, col3 lines 46-67 and col4 lines 25-35).

Funk however fails to specifically disclose reducing an average power consumption of the transmitter by adjusting the transmission data rate of the transmitter, in combination with adjusting the transmit power as disclosed by Funk. However in a very similar endeavor, Ohno discloses a wireless communication equipment for a remote station having a function for controlling a temperature in the equipment (col1 lines 4-10). Ohno further discloses;

adjusting the transmission data rate of the transmitter (when a temperature sensor senses that the temperature in the box is higher than a set temperature, the

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temperature control portion changes a transmission rate, col5 lines 40-50 and col5 lines 60-65). It would have thus been obvious to a person skilled in the art at the time the invention was made to incorporate the concept of modifying the data rate as disclosed by Ohno, into the method and apparatus for reducing power in radio transmitters as disclosed by Funk, in order to have additional means for efficiently reducing the temperature of a transceiver, so that the control of the temperature at the transmitter may be controlled in a more flexible manner, which incorporates the use of modifying a transmit power per bit (transmission power of signal) as well as modifying the transmission data rate.

Regarding claim 57, 63, Funk discloses the transceiver of claim 56, wherein the transceiver comprises a mobile station (mobile radio device, abstract).

Regarding claim 58, 64, Funk discloses the transceiver of claim 56, wherein the processor is configured to reduce the average power consumption of the transmitter by a controlled amount, by determining a combination of transmit power per bit and transmission data rate adjustments that adjust the average power consumption of the transmitter to a desired point on a total transmit power curve (col4 lines 10-21 and seen from figure 2).

Regarding claim 58, 61, 65, 67, Funk discloses the transceiver of claim 56, wherein the processor is configured to reduce the average power consumption of the transmitter by decreasing the transmit power per bit of the transmitter and, in response to then receiving a transmit power control command (col3 lines 30-37 and cik4 lines 30-43) ordering the transceiver to increase its transmit power, increasing the transmit power per bit of the transmitter as commanded, in combination with decreasing the transmission data rate of the transmitter (this is simply the flexible means of reducing the power at a mobile station that the combination of Funk (reduce transmit power level) and Ohno (reduce transmission rate) may provide in which these are simply system parameters on how to reduce the power).

Regarding claim 60, 66, Ohno discloses the transceiver of claim 59, wherein the transceiver is configured to request a decrease in transmission data rate in association with decreasing the transmission data rate of the transmitter (col5 lines 35-40).

Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NGUYEN NGO whose telephone number is (571)272-8398. The examiner can normally be reached on Monday-Friday 7am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang Yao can be reached on (571)272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner, Art Unit 2473